

CLAIMS

What is claimed is:

1. An actuator assembly, comprising:
a telescopic member defining an axis;
a linear electric motor attached to said telescopic member along said axis
such that operation of said linear electric motor drives said telescopic member between an
extended and a retracted position.
2. The actuator assembly as recited in claim 1, wherein said telescopic member is
biased toward said extended position.
3. The actuator assembly as recited in claim 1, wherein said telescopic member is
a gas spring.
4. The actuator assembly as recited in claim 3, wherein said linear electric motor
includes a slidable rotor mounted to a cylinder of said gas spring.
5. The actuator assembly as recited in claim 4, wherein said slidable rotor is
drivable along a stator having a substantially U-shape in cross section.
6. The actuator assembly as recited in claim 1, further comprising a controller
in communication with said linear electric motor to drive said telescopic member between
said extended and said retracted position.
7. The actuator assembly as recited in claim 6, further comprising a remote to
transmit a position signal to said controller.

8. A vehicle closure member, comprising:
a gas spring defining an axis, said gas spring biased toward an extended position, one end of said gas spring mounted to a vehicle liftgate and an opposite end of said gas spring mounted to a vehicle body, said gas spring movable between said extended position and a retracted position; and
a linear electric motor attached to said gas spring along said axis such that operation of said linear electric motor drives said gas spring between an extended and a retracted position.
9. The vehicle closure member as recited in claim 8, wherein said linear electric motor includes a slidable rotor mounted to a cylinder of said gas spring.
10. The vehicle closure member as recited in claim 9, wherein said slidable rotor is drivable along a stator having a substantially U-shape in cross section.
11. The vehicle closure member as recited in claim 8, further comprising a controller in communication with said linear electric motor to drive said telescopic member between said extended and said retracted position.
12. The vehicle closure member as recited in claim 11, further comprising a remote to transmit a position signal to said controller.

13. A method of actuating a closure member having a gas spring comprising the steps of:

- (1) attaching a linear electric motor to a gas spring along a common axis;
- (2) operating the linear electric motor to drive a gas spring between a retracted and an extended position; and
- (3) driving the gas spring with the linear electric motor to move a closure member between an open and a closed position.

14. A method of actuating a closure member as recited in claim 13, further comprising the step of counterbalancing the closure member with the gas spring.

15. A method of actuating a closure member as recited in claim 13, further comprising the step of operating the linear electric motor to drive the closure member to a locked position.

16. A method of actuating a closure member as recited in claim 13, further comprising the step of operating the linear electric motor to hold the closure member in a desired position.

17. A method of actuating a closure member as recited in claim 13, further comprising the step of remotely actuating the linear electric motor.